AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous claim listings and versions:

1. (Currently Amended) Dye-in-polymer (DIP) medium for the recording layer of write-once-read-many (WORM) optical disks with fluorescent reading, containing:

a fluorescent dye[[,]] capable ~~to absorb the~~ of absorbing recording laser radiation, present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer;

a compound[[,]] capable ~~to generate~~ of generating free radicals as a result of decomposition under heating[[,]] induced by laser-radiation absorption by the fluorescent dye; and

a film-forming polymer with high transparency, low head conductivity and providing the necessary quantum output of the dye fluorescence,

wherein the compound generating free radicals is selected from the group consisting of azo-bisisobutyronitrile, p-bromobenzene diazohydroxide, triphenylmethylazibenzene, diazobenzoyl, nitrosoacetanilide, and peroxides.

2. (Previously Presented) DIP medium for the recording layer according to claim 1, wherein said fluorescent dye is chosen from xanthene dyes of the eosin and rhodamine groups, acridine, oxazine, azine, perylene, violanthrone, cyanine, phthalocyanine dyes, indigoide colors and porphyries.

3. (Cancelled)

4. (Currently Amended) DIP medium for the recording layer according to claim 1, wherein said film-~~making~~forming polymer is chosen from the group of resins consisting of cellulose esters, cellulose ethers, and acrylic resins.

5. (Currently Amended) DIP medium for the recording layer according to claim 1, ~~with the difference that~~ wherein the recording layer also contains a non-~~flouresceent~~ fluorescent dye with an absorption spectrum range just slightly overlapping with

the absorption and fluorescence spectrum ranges of the fluorescent dye and with the maximum absorption and/or fluorescence spectrum range of the fluorescent dye.

6. (Currently Amended) DIP medium for the recording layer according to claim 1, ~~with the difference that~~ wherein the recording layer also contains a non-~~fluroresceent~~ fluorescent dye with an absorption spectrum range overlapping the absorption and/~~fluoreseense~~ fluorescence spectrum range of the ~~fluroesceent~~ fluorescent dye.

7. (Previously Presented) Method of obtaining a single-layer optical WORM disc, comprising the steps of dissolving the fluorescent dye, compound and film-forming polymer according to claim 1 in an organic solvent chosen from the group consisting of alcohols, ketones, amides, sulfoxides, ethers, esters, halogenated aliphatic hydrocarbons and aromatic solvents to form a composition, or introducing the fluorescent dye, compound and film-forming polymer according to claim 1 into the solvent as microcapsules less than 0.2 micron in size to form a composition; and covering said composition by spin coating, roller coating or dip coating on a substrate selected from the group consisting of glass, polymethylmethacrylate, polycarbonate, and polyethylene terephthalate disc.

8. (Currently Amended) Method of obtaining a single-layer optical WORM disc, comprising creation of a recording layer from two sub-layers, a lower sub-layer containing fluorescent dye present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, and an upper sub-layer containing a substance generating free radicals at high temperature.

9. (Currently Amended) Method of obtaining a single-layer optical WORM disc, comprising creation of a recording layer from two sub-layers, an upper sub-layer containing fluorescent dye present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, and a lower sub-layer containing a substance generating free radicals at high temperature.

10. (Currently Amended) Method of obtaining a multilayer WORM disc by consecutive bonding of ~~the~~ single-layer discs one to another, forming a multilayer system with two ~~and~~ or more recording layers, in which the recording layers alternate with separating layers of substrate, wherein the recording layers comprise a fluorescent dye, capable of

absorbing recording laser radiation, present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, and a compound capable of generating free radicals as a result of decomposition under heating induced by laser-radiation absorption by the fluorescent dye.

11. (Cancelled)

12. (Currently Amended) DIP medium for the recording layer according to ~~claim 3~~ claim 1, wherein the content of said compound, capable ~~to generate~~ of generating free radicals, in the recording layer ranges from about 0.1-20%.

13. (Currently Amended) DIP medium for the recording layer according to ~~claim 3~~ claim 1, wherein the peroxides are selected from the group consisting of benzyl peroxide and tert-dibutyl peroxide.

14. (Previously Presented) DIP medium for the recording layer according to claim 4, wherein the cellulose esters are selected from the group consisting of nitrocellulose, cellulose acetate, and cellulose acetate butyrate.

15. (Previously Presented) DIP medium for the recording layer according to claim 4, wherein the cellulose ethers are selected from the group consisting of methyl cellulose, ethyl cellulose, butyl cellulose, and vinyl resins, and the vinyl resins are selected from the group consisting of polyvinyl acetate, polyvinyl butyral, polyvinyl acetyl, polyvinyl alcohol, and polyvinyl pyrrolidone.

16. (Previously Presented) DIP medium for the recording layer according to claim 4, wherein the acrylic resins are selected from the group consisting of polymethylmethacrylate, polybutyl acrylate, polymethacrylic acid, polyacryl amide, and polyacrylonitrile.

17. (New) The DIP medium for the recording layer according to claim 1, wherein the fluorescent dye is present in an amount of 0.1 weight percent to 10 weight percent of the recording layer.

18. (New) The method of obtaining a single-layer optical WORM disc according to claim 8, wherein the fluorescent dye is present in an amount of 0.1 weight percent to 10 weight percent of the recording layer.

19. (New) A recording layer comprising the DIP medium according to claim 1, wherein the recording layer is 100nm to 1000 nm in thickness.

20. (New) A recording layer comprising the DIP medium according to claim 1, wherein the recording layer is 200 nm to 500 nm in thickness.